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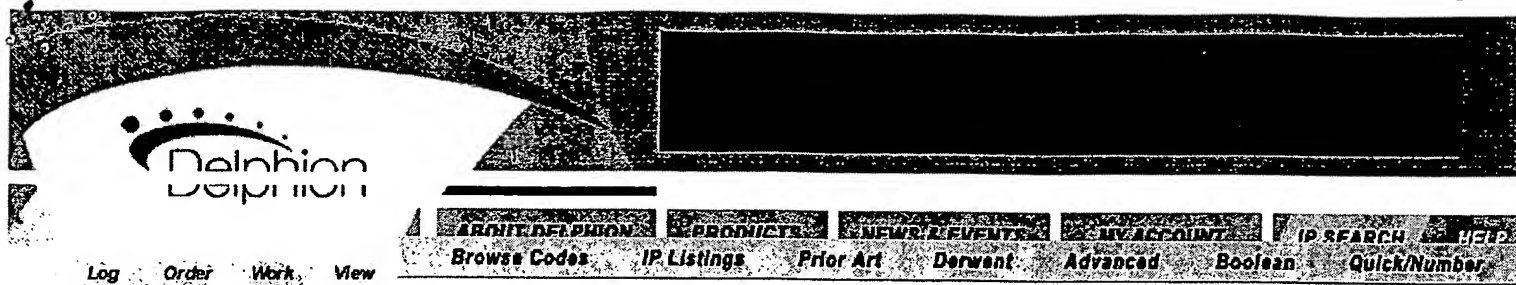
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Title: **JP7029563A2: BATTERY SEPARATOR AND LITHIUM BATTERY USING THE SAME**

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Country: **JP Japan**
Kind: **A** (See also: [JP7029563B4](#))

Inventor(s): **FUJII TOSHIO**
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Applicant/Assignee: **mitsubishi chem corp**
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Issued/Filed Dates: **Jan. 31, 1995 / Nov. 5, 1993**

Application Number: **JP1993000276947**

IPC Class: **[H01M 2/16](#); [H01M 2/18](#); [H01M 6/14](#); [H01M 10/02](#);**

Priority Number(s): **May 11, 1993 [JP1993000109619](#)**

Abstract:



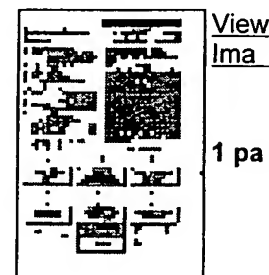
Purpose: To prevent the overheating of the battery by using as a separator a porous film or sheet made of ultrahigh molecular weight polyethylene having a viscosity average molecular weight of a value greater than that specified, the film or sheet having a specified thickness, air permeability, hole percentage, pin piercing strength, thermal blockage temperature, and thermal film breakage resistance temperature.

Constitution: As an ultrahigh molecular weight polyethylene, polyethylene having a viscosity average molecular weight of 500,000 or more and, as a plasticizer added thereto, paraffin wax, n-alkane, or the like which has compatibility with the ultrahigh molecular weight polyethylene and which does not evaporate during melt-kneading or forming is used. The polyethylene and plasticizer are kneaded together and are melt-extruded to make a film or a sheet. As a result, a separator with a high resistance to thermal film breakage which has a thickness of 10 to 100µm, an air permeability of from 20 to 2000sec/100cc, a hole percentage of 15 to 80%, a pin-piercing strength of 120g/25µm or more, and a thermal film breakage temperature of 160°C or more is provided.

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Other Abstract Info: CHEMABS 121(26)302605X DERABS C94-201615

Foreign References: No patents reference this one



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PATENT ABSTRACTS OF JAPAN

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1)Application number : 05-276947

(71)Applicant : MITSUBISHI CHEM CORP

2)Date of filing : 05.11.1993

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0)Priority

Priority number : 05109619 Priority date : 11.05.1993 Priority country : JP

4) BATTERY SEPARATOR AND LITHIUM BATTERY USING THE SAME

7)Abstract:

PURPOSE: To prevent the overheating of the battery by using as a separator a porous film or sheet made of ultrahigh molecular weight polyethylene having a viscosity average molecular weight of a value greater than that specified, the film or sheet having a specified thickness, air permeability, hole percentage, pin piercing strength, thermal blockage temperature, and thermal film breakage resistance temperature.

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GAL STATUS

Date of request for examination]

06.09.1999

•Date of sending the examiner's decision of rejection]

Kind of final disposal of application other than the
examiner's decision of rejection or application
converted registration]

Date of final disposal for application]

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Number of appeal against examiner's decision of
rejection]

Date of requesting appeal against examiner's
decision of rejection]

Date of extinction of right]

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